

Abstract

According to the present invention there is provided an expandable medical device having, a plurality of elongated beams, the plurality of elongated beams joined together to form a substantially cylindrical device which is expandable from a cylinder having a first diameter to a cylinder having a second diameter. A plurality of hinges connecting the elongated beams have a hinge width, wherein the hinge width is smaller than the beam width. A pawl is disposed adjacent to and substantially parallel to the hinge prior to expansion of the medical device and a plurality of teeth are adapted to receive the pawl. The present invention additionally provides the benefit of limiting the amount of recoil of an expandable device by engaging a locking mechanism, thereby retaining the expanded diameter of the device.

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